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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/658,721	09/09/2003	Shek Fai Lau	SHPR-01084US1	2770
23910 7	590 08/24/2004		EXAMINER MCDONALD, RODNEY GLENN	
FLIESLER M FOUR EMBAI	IEYER, LLP RCADERO CENTER			
SUITE 400	Control Control		ART UNIT	PAPER NUMBER
SAN FRANCISCO, CA 94111			1753	

DATE MAILED: 08/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
Office Action Commence	10/658,721	LAU ET AL.	$\mathcal{I}$
Office Action Summary	Examiner	Art Unit	
	Rodney G. McDonald	1753	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address	
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after StX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	ely filed s will be considered timely. the mailing date of this communication O (35 U.S.C. § 133)	
Status			
1) Responsive to communication(s) filed on			
	action is non-final.		
3) Since this application is in condition for allowar	ce except for formal matters, pro	secution as to the merits is	
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	3 O.G. 213.	
Disposition of Claims			
4)⊠ Claim(s) <u>1-22</u> is/are pending in the application.			
4a) Of the above claim(s) is/are withdraw	n from consideration.		
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>1-22</u> is/are rejected.			
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and/or	election requirement.		
Application Papers			
9) The specification is objected to by the Examiner			
10) ☐ The drawing(s) filed on is/are: a) ☐ acce	pted or b) objected to by the E	xaminer.	
Applicant may not request that any objection to the d			
Replacement drawing sheet(s) including the correction	on is required if the drawing(s) is obje	ected to. See 37 CFR 1.121(d)	).
11)☐ The oath or declaration is objected to by the Exa	aminer. Note the attached Office	Action or form PTO-152.	
Priority under 35 U.S.C. § 119			
12)☐ Acknowledgment is made of a claim for foreign ¡ a)☐ All b)☐ Some * c)☐ None of:	oriority under 35 U.S.C. § 119(a)-	(d) or (f).	
<ol> <li>Certified copies of the priority documents</li> </ol>			
2. Certified copies of the priority documents			
3. Copies of the certified copies of the priori		d in this National Stage	
application from the International Bureau			
* See the attached detailed Office action for a list of	the certified copies not received	l.	
	•		
Attachment(s)			
1) X Notice of References Cited (PTO-892)	4) 🔲 Interview Summary (I	PTO-413)	
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date	э	
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 1/9/04.	5) Notice of Informal Pa 6) Other:	tent Application (PTO-152)	

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 2, 8, 9, 19 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weinberg (U.S. Pat. 5,814,135) in view of Weinberg (U.S. Pat. 5,484,472) and Ebara (Japan 58-27654).

Weinberg '135 teaches a personal air transporter-conditioner device.

Weinberg '135 teaches that his unit is wearable and directs ones attention to

U.S. Pat. 5,484,472, which Weinberg '135 incorporates by reference. Weinberg '135 in Fig. 1 a portable housing with a first electrode 26 in the form of a metallic

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needle-like emitter point. A second electrode in the form of a metallic grid is present through which purified air exits. (Column 3 lines 26-32)

The metallic grid 24 is held at ground potential relative to the emitter point 26 (base and apex) so that ions produced in the corona discharge are accelerated towards the grid 24 (having openings). This results in a mass flow of air (i.e. ionized molecules pull along a large number of nonionized molecules by means of cohesive forces), which propels the purified air out through openings in the grid 24. (Column 3 lines 46-53)

In use air near the emitter point 26 becomes ionized by a corona discharge developed by a high voltage supplied by the high voltage circuit module 32. (Column 3 lines 26-32)

In Fig. 2 air is drawn through a filter 14 and outlets at the grid 24. (See Figure. 2; Column 4 lines 4-35)

The differences between Weinberg '135 and the present claims is the portability of the device utilizing a strap for placing it around a persons neck and a moisture retaining material for increasing humidity of the outgoing air.

Weinberg '472 teaches that a cord 22 can be utilized to carry the device around the user's neck (see Fig. 2b). (Column 4 lines 35-37)

The motivation for utilizing a cord is that it allows for carrying the device around a persons neck. (Column 4 lines 35-37)

Ebara teach utilizing a fabric or fibrous substance 3 from a water tank 1 by a capillary phenomenon and forcibly evaporated into air by a blower 4 to form humidified air 5. This humidified air 5 is ionized to a positive ion to a positive ion

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and a negative ion by a negative needle like electrode 6 but most of the positive ion is attracted to the electrode 6 and the negative ion is under a condition directly remaining around the electrode 6 but, at the same time, discharged out of a cabinet 7 by the blower 4. (See Abstract)

The motivation for utilizing a moisture retaining material is that it allows for forming humidified air. (See Abstract)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Weinberg '135 by utilizing a means for carrying the portable device as taught by Weinberg '472 and by utilizing a moisture retaining material as taught by Ebara because it allows for carrying the device around the neck of the person and for forming humidified air.

## **Double Patenting**

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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Claims 1-22 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims of U.S. Patent No. 6,632,407 in view of Weinberg (U.S. Pat. 5,484,472).

U.S. Pat. No. 6,632,407 teach a personal transporter conditioner for air conditioning that has at least one vent, a self-contained ion generator, means for increasing the humidity of the air, and means for turning on the device in the form of BB to generate at least one of noise and force that is detected by the transducer. The pin shaped electrode and ring-shaped electrodes are discussed. The means for increasing humidity can be polyethylene and foam.

The difference between U.S. Pat. No. 6,632,407 and the present claims is that the portability of the device is not discussed.

Weinberg discussed above teach the portability of a personal electrokinetic air transporter-conditioner. (See Weinberg discussed above)

The motivation for having the device portable is that it allows for easy movement of the device. (Column 2 line 24)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified U.S. Pat. 6,632,407 by having it portable as taught by Weinberg because it allows for moving the device easily.

Claims 1-9 and 19-22 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims of U.S. Patent No. 6,544,485 in view of Weinberg (U.S. Pat. 5,484,472).

U.S. Pat. 6,544,485 teach an air-transporter conditioner comprising a housing defining at least one input port and one output port with at least one

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electrode and at least one second electrode. A moisture retaining element is present in the device. The electrodes can be pin shaped and have cylindrical tubes. (See Claims)

The difference between U.S. Pat. 6,544,485 and the present claims is that the portability of the device is not discussed.

Weinberg discussed above teach the portability of a personal electrokinetic air transporter-conditioner. (See Weinberg discussed above)

The motivation for having the device portable is that it allows for easy movement of the device. (Column 2 line 24)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified U.S. Pat. 6, 544,485 by having it portable as taught by Weinberg because it allows for moving the device easily.

Claims 1-9 and 19-22 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims of U.S. Patent No. 6,163,098 in view of Ebara (Japan 58-27654).

U.S. Pat. No. 6,163,098 teach a hand-held (portable) electro-kinetic air transporter having a housing with at least one vent, an electrode assembly defined between output ports to create ions, the ion generator outputs electrostatic flow in a downstream direction.

The difference not yet discussed is providing a moisture retaining material.

Ebara discussed above teach utilizing a moisture retaining material in an ion generator for humidifying an ionized atmosphere. (See Ebara discussed above)

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The motivation for utilizing a moisture retaining material is that it allows for humidifying an ionized atmosphere. (See Ebara discussed above)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified U.S. Pat. 6,163,098 by utilizing a moisture retaining material as taught by Ebara because it allows for humidifying an ionized atmosphere.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney G. McDonald whose telephone number is 571-272-1340. The examiner can normally be reached on M- Th with Every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam X. Nguyen can be reached on 571-272-1342. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rodney G. McDonald Primary Examiner Art Unit 1753

RM August 19, 2004